WORKING WITH

Stopping the Hornet Invasion

OBJECTIVE: Students will use a map, a map scale, and proportions to determine where scientists placed traps to hunt down a nest of Asian giant hornets.

KEY STANDARDS

CCSS: 6.RP.A.3.D, 6.G.A.3, *6.NS.C.8

TEKS: 6.5A, 7.4E, 7.5C, *6.2B **MPS:** MP3, MP4, MP5 *Additional standards covered in Skills Sheets.

ENGAGE

Display a map of your town or city for students. If you don't have one readily available or cannot find one on the internet, you can use Google Maps, which includes a map scale in the bottom right-hand corner. Then ask the following questions about the map:

- What does this image show? (a map of our town/city)
- What do you see on the map? (Possible answers: roads, parks, buildings, a title, a legend, a map scale, etc.)
- · Can you locate where you live?
- · Can you locate where our school is?
- Can you use this map to determine the distance from your house to the school? Explain. Some students may know that using a map scale helps people find real-life distances using a map. Others may be unaware.

VIDEO: REMOVING AN ASIAN GIANT HORNET NEST

Pause on the first video frame. Ask students to describe what they notice in this frame and to draw conclusions from what they notice. For example, some may notice the suits the scientists are wearing and conclude that they protect from hornet stings. Then play the remainder of the video and ask: What did the scientists do when they discovered the Asian giant hornet nest?

CLOSE-READING QUESTIONS

Perform a close read of the article with students by reading the text multiple times to understand what the article says more deeply with each reading.

• First, have students read the article individually. Give them a purpose for this first reading: Have them circle any words that they don't know the meaning of or don't know how to pronounce. Then read the article aloud to the class. Direct students to highlight any of the words they had circled that they now know the meaning of.

Then go over the words that remain circled with your students and define them as a class.

- Next, have students read the article individually again.
 Ask the following questions about main ideas and details of the text: 1) What is this article mostly about? 2) These hornets kill bees, which are very important to the American food supply. So people are setting traps to try to capture these hornets. Are these hornets dangerous?
 3) How did scientists attempt to find the hornets' nest?
- Read the article aloud to your students. After this
 reading, ask the following questions about the structure
 and purpose of the text: 1) How does the graphic
 "Humongous Hornets" enhance the article? 2) What is the
 purpose of each of the article's sections?

SKILL SPOTLIGHT

Read through the introduction and example of the "Working With a Map's Scale" box on page 19. After Step 2, ask: What do you notice about the proportion? (The left-hand side of the proportion is the map scale. The right-hand side is the specific numbers in the word problem. Also, both numerators have the unit "unit," and both denominators have the unit "kilometers.") For Step 3, reinforce how to isolate a variable by dividing both sides by the factor that is multiplied by the variable. Then have students complete the "Your Turn" questions individually.

MATH @ HOME

Provide your students with graph paper or digitally distribute the "Coordinate Plane: 4 Quadrants" template. Have students draw or design a fictional map. Then have them create a map scale that represents how many units are equal to a specific distance. Ask students to identify at least 5 distances between objects/places they drew on their maps.

→ scholastic.com/math

VIDEO:

Removing an Asian Giant Hornet Nest

SKILLS SHEETS:

→ Mapping Hornets

→ Distances on a Coordinate Plane

EXIT SLIPS:

A On LevelB Advanced